ABSTRACT OF THE DISCLOSURE

The invention relates to a three-dimensional model data generating apparatus which can generate efficiently and accurately three-dimensional model data of a structural member constituting a machine tool. A three-dimensional model data generating apparatus 1 has: X-, Y-, and Z-axis imaging mechanisms 21, 22, 23 each of which has two CCD cameras that are spaced apart from each other by a predetermined distance, and which image structural member constituting a machine tool 10 in the respective directions of the X-, Y-, and Z-axes(three orthogonal axis directions), thereby generating two-dimensional image data; and a model data generating section which 31 generates three-dimensional model data including at least shape data which define a three-dimensional shape of the structural member on the basis of generated two-dimensional image data.